

# Amphenol Star-Line® Series Connectors



## HEAVY DUTY ELECTRONIC CONNECTORS FOR HARSH ENVIRONMENTS

Heavy-duty, multi-pin, electrical connector designed for rugged and harsh environments. One-piece, two-keyed shell, coupling nut, cable adapter, gland and clamp nut are constructed of high-grade machined aluminum with a hard coat finish for superior corrosion resistance. Formerly Pyle Star Line.

## FEATURES

### UL & CSA

Listed to UL1977/CSA C22.2 requirements.

### ENVIRONMENTAL RESISTANCE

Design and materials withstand the most challenging operating conditions. Series has an IP68 rating.

### EASILY ACCESSIBLE WIRE TERMINALS

Conductors are readily terminated to contacts. Cable housings are slipped over conductors or leads after terminating. Cumbersome handling and seating of inserts with conductors attached is eliminated.

### LARGE WIRING SPACE

Ample wiring space is provided in cable housings and hardware.

### REVERSIBLE INSERTS

A full range of contact inserts for power, signal and mixed applications are available. All are interchangeable and reversible to suit specific needs.

### DOUBLE-LEAD THREAD COUPLING

Modified Acme Thread does not clog under adverse conditions of ice, snow, sand or mud and provides the quick coupling feature.

### HARD ANODIC COATING

All machined aluminum parts finished with a hard, scratch-resistant coating per MIL-A-8625, Type III. Dielectric strength 1800 volts. Heat resistance of 750°F.

### HIGH TENSILE STRENGTH ALUMINUM

Bar Stock Components precision machined. Points of impact designed for extra strength.

### RADSOK® HIGH AMPERAGE CONTACTS

Special arrangements are available with RADSOK high amperage contacts. Standard Star-line EX inserts are not interchangeable with new RADSOK contact insert arrangements.

### ROHS COMPLIANT PRODUCT AVAILABLE

TECHNICAL SPECIFICATIONS

**MATERIALS AND FINISHES**

|                  |                       |
|------------------|-----------------------|
| Shell            | Aluminium Alloy       |
| Shell Plating    | Hard Anodic           |
| Contacts         | Copper Alloy          |
| Contact Platings | Silver or Gold Plated |
| Seals            | Buna Rubber           |

**ELECTRICAL DATA**

|                  |              |
|------------------|--------------|
| Wire Range Sizes | 18 to 777MCM |
|------------------|--------------|

Current Rating

| CONTACT SIZE | MAX. CURRENT RATING PER CONTACT AMPS |
|--------------|--------------------------------------|
| 18           | 3                                    |
| 16           | 16                                   |
| 12           | 30                                   |
| 10           | 40                                   |
| 8            | 50                                   |
| 4            | 90                                   |
| 1/0          | 155                                  |
| 4/0          | 225                                  |
| 313MCM       | 325                                  |
| 350MCM       | 325                                  |
| 373MCM       | Contact us                           |
| 444MCM       | Contact us                           |
| 500MCM       | 750                                  |
| 535MCM       | Contact us                           |
| 646MCM       | 940                                  |
| 777MCM       | 1,135                                |

**MECHANICAL**

Operating Temperature -67°F to +257°F (-55°C to +125°C)

Insulation Strip Length

| CONTACT SIZE | STRIP LENGTH - SOLDER |      | STRIP LENGTH - CRIMP |      |
|--------------|-----------------------|------|----------------------|------|
|              | INCHES                | MM   | INCHES               | MM   |
| 18           | 0.284                 | 7.2  | 0.453                | 11.5 |
| 16           | 0.284                 | 7.2  | 0.575                | 14.6 |
| 12           | 0.343                 | 8.7  | 0.611                | 15.5 |
| 10           | 0.469                 | 11.9 | 0.674                | 17.1 |
| 8            | 0.595                 | 15.1 | 0.827                | 21.0 |
| 4            | 0.658                 | 16.7 | 0.906                | 23.0 |
| 1/0          | 0.721                 | 18.3 | 1.221                | 31.0 |
| 4/0          | 0.721                 | 18.3 | 1.221                | 31.0 |
| 313MCM       | 0.843                 | 21.4 | 1.319                | 33.5 |
| 350MCM       | 0.843                 | 21.4 | 1.319                | 33.5 |
| 373MCM       | 0.843                 | 21.4 | 1.319                | 33.5 |
| 444MCM       | 1.969                 | 50.0 | 1.969                | 50.0 |
| 500MCM       | 1.969                 | 50.0 | 1.969                | 50.0 |
| 535MCM       | 1.969                 | 50.0 | 1.969                | 50.0 |
| 646-777MCM   | 1.969                 | 50.0 | 1.969                | 50.0 |

Mating Life 500 cycles

Salt Spray 300 days

Vibration 10g

Shock 60g

Sealed IP68

Contact Type Solder, Crimp, Power, Signal and Coax

Number of Circuits 1 to 143

Polarization Keyway with optional insert orientation

Approvals UL #E184393